Equine Digital Pulses

What is a digital pulse and why is it important?
The digital pulse is the pulse that can be felt as blood flows through the artery into a horse’s hoof. If there is any inflammation of the tissues in the leg or hoof the blood flow will be restricted making the pulse stronger and easier to feel. A pulse that is easy to find and is bounding (a throbbing sensation much like a headache or smashed finger) may be an early indicator that there is some sort of injury to the hoof or lower leg, making the digital pulse an important diagnostic tool.

How to find the digital pulse:
A digital pulse on a horse with no hoof or lower limb injuries will be hard to find, so don’t worry if you can’t find it when your horse is sound. When feeling for the digital pulse use the index and middle fingers of your hand. Do not use your thumbs, your thumbs have a pulse of their own much like your wrist or your neck and you will end up feeling your own pulse instead of your horse’s. The pulse can be felt on both the outside and inside of the leg from just above the fetlock, over the fetlock, and down the pastern (see the figures at right).

What are some common causes of an increased digital pulse?
A strong pulse in one hoof can be an indicator of infection or of an injury such as an abscess, bruise, or an injury in the leg above the hoof. A strong pulse in two or more legs accompanied by hoof tenderness can be an indicator of laminitis, especially if they are rocking back off their front feet to bear more weight on their hind feet.

Determine your horse’s baseline:
It is a good idea to find out what your horse’s normal digital pulse is when they are sound. To do this take your horse’s pulse before exercising each morning for at least a week and then periodically after that. When you are familiar with your horse’s normal digital pulse it will be more evident to you when it is irregular.